From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Brien Pepperdine <pepperb@gov.on.ca>
Subject: [2385] 25 w linear amp
Message-ID: <Pine.OSF.3.90.960105132248.2697D-100000@govonca2.gov.on.ca>

Wow. I have to say this qrp list is very dedicated. Seeing how the Jan. CQ has a nice linear amp 25w. design by Doug DeMaw. And I see nothing about shoes for the 5 watts on qrp-l.

Anyhow, seeing as I raised the issue of an amp for qrp before, I do have to say it appears to be a useful circuit. Given my distance from the US and bad home antenna this amp would be a good thing to have going - sure, I would not be absolute qrp, but the signal would be helped and I'd still get to use those nice NorCal, NI1G and OHR rigs.

I can here Rick Zabroski and Bob Gobrick laughing even all the way from Calgary and Newfoundland. I admit it, they are better Canadian qrpers than I am. So is Glen, and Joe, and so on.....

At least the CQ design uses some current transistors, unlike some of the older published designs. Remember: Canada. Far from the suppliers, not a lot of old stock about (see also: electrolytic capacitors costing $$$$$$).

Brien
Toronto
Canada
-21 degrees Celcius
(BTW, Yellowknife, NWT was the warmest spot on mainland Canada yesterday, at -9 degrees)

pepperb@gov.on.ca

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: "rohre" <rohre@arlut.utexas.edu>
Subject: [2407] A more serious look at RF plastics
Message-ID: <n1391260141.60662@msmailgw1.arlut.utexas.edu>

There are a number of factors besides the plastic that can affect how well it performs under a given set of RF conditions.

My microwave test for RF suitability is quite adequate for QRP and general ham uses. But it may be necessary to test any candidate piece because of additives to the basic plastic formula for strength or coloring purposes. The

most basic example is fiberglass, which is glass fibers and a plastic formulated together to enhance the applications of both.

Not all common plastics today are PVC's (Poly vinyl chloride) formulations. There are urethanes, plexiglas, (excellent for RF), and mylar among others. Old bakelite from the earlier days of radio, and formica are other familiar plastics. One example of a colorant that might add a resistive property was if a black carbon powder was added to an otherwise clear or amber epoxy to darken it.

Other simple tests for ferrrous metal loading of a plastic would be use of a magnet, and if you had dielectric test equipment you could apply those tests. As a matter of fact, you could adapt the low current TV high voltage supply from that old junker black and white set in your junk box to a dielectric breakdown test function. Plastic supply houses sell sheets of plexiglass that make a good high voltage insulator, or get a couple of ceramic standoffs a few inches high at the next ham swap. You could connect a test sample from an energized metal clamp on top of one ceramic insulator to another one, that would go to the return side of the high voltage power supply. If your sample has rounded edges and corners and no corona develops, you have a way to test a sample for resistance to flashing over. Simply clamp it between the source and return of the high voltage power supply, then energize.

Have a hot stick, which is a insulated handle with a grounding strap to make sure there is no high voltage charge on the clamp before taking hold of the sample after a test. Safety first and think before working around high voltage equipment.

Although, there may not be much use for such tests by QRPers, what I have attempted to show is how commonly available equipment around the house can be put safely to basic material test applications for candidate materials.

And for those who smiled when mention of testing your plastic with a humble magnet was mentioned.....I once had to certify some transformers a client had manufactured for the old Coast Guard Loran stations AC power sources. These had to meet a certain spec and not conduct the Loran RF frequencies back into the three phase power line to the station. Much to my surprise, each of the brand new transformers failed miserably. If anything, they enhanced the transfer of RF to the AC power line! Upon examining how each transformer winding had been potted, I found the client had hit upon a money saving method of potting. Use less expensive epoxy, and fill as much of the empty spaces with washed gravel as you could. Unfortunately, his source of gravel had many ferrous stones! Murphy had then seen to it that the amount of potting filler happened to resonate the transformer smack in the middle of the Loran frequency band!

Luckily, it was my boss and not myself that had to break this news to the already behind- in- shipping client! That company survived and is better

known in other areas of electric equipment today.

But the bottom line there is it is all right to inovate and find new uses for materials, but consider all the implications and test to make sure you made the right choice.

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: lewise@bga.com (KA5T Larry Wise)
Subject: [2410] address test
Message-ID: <199601060108.TAA17856@zoom.bga.com>

Test msg
KA5T - Larry Wise - Georgetown, Texas - lewise@bga.com

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: V$BCIESLAK@china.qgraph.com
Subject: [2401] Are we going to have foxes in 96?
Message-ID: <01HZNMU9JZNM005B90@hub.qgraph.com>

Have I missed the fox schdeules for this first week of the new year?

Brian AE9K

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Steve Bornstein <saborns@freenet.columbus.oh.us>
Subject: [2370] Correction to OAK HIlls for Sale
Message-ID: <Pine.3.07.9601051034.A8412-9100000@acme>

Sorry about that,
The 80 meter rig and the 30 meter rig are SPRINTS. With their low power consumption and small size they are great for outdoor operation. I have used them with dipoles and had great results.

Sorry about the mistaken listing.

73, Steve K8IDN QRP-L #331

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: rheiss@tuba.aix.calpoly.edu
Subject: [2297] Could We Spin Off Two Lists and Refocus QRP-L?
Message-ID: <9601050704.AA34323@tuba.aix.calpoly.edu>

Have you noticed that two of the most popular topics with QRP-L
authors are not strictly QRP-related, and are of general interest
to many if not most hams outside the QRP community? If these two
broad areas had their own mailing lists, they would most likely
thrive and satisfy those who care deeply about those topics. The
leftover volume on QRP-L would have better focus and could win
back some very busy people as subscribers. The proposed lists:

TUNER-FANS-L

    * tuners
    * antennas, especially kinds which typically require tuners
    * balanced and unmatched feedlines
    * counterpoise systems
    * SWR measurement

HF-MOBILE-RIGS-L

    * 20 to 150 watt, compact, value-priced rigs. Examples:
          Kenwood TS-50, TS-1xx, TS-4xx
          Yaesu FT-900, FT-890, FT-747, FT-301, FT-7
          ICOM IC-706, IC-73x, IC-72x, IC-707
          Ten-Tec Triton, Argosy, Delta, Scout
          Alinco, Atlas, Uniden, Radio Shack, Ranger

73, Rob KO6KA
rheiss@tuba.calpoly.edu

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Harry_Chase@smtpgwy.windata.com (Harry Chase)
Subject: [2378] Could We Spin Off Two Lists and Refocus QRP-L?
Message-ID: <9600058208.AA820872150@smtpgwy.windata.com>

Oh-oh.... This topic has been raging over on the VHF reflector for a
week and a half now and already a flame war has begun over it!
     The administrator made a suggestion to split that one into 2

lists and boy, did the comments fly thick and fast! For what its worth, I like QRP-L as it is. The wide range of topics is , I think, inevitable when you have a group as large as this one. Also I have learned quite a lot about things I was not interested in but after reading about them, found them to be useful!! Many areas of our hobby do interact and stuff learned about lowband antennas may be useful later even if we are not presently building antennas. Same for tuners, etc. etc. Its nice to be able to get all this stuff in one place; and whenever something you dont care about shows up, there is a DELETE function to deal with it.

Harry
WA1VVH

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: harry.bump@hamdata.leba.net (Harry Bump)
Subject: [2295] CW and computers
Message-ID: <9601042248121787@hamdata.leba.net>

I've been reading QRP-L for a month now and really enjoy 'the news' (not that I'm any more active than before). When I can get on the air I'm using an NN1G 20m rig with built-in Curtis chip keyer. I've got the (as yet not started) Cascade and am grabbing up all the QRP-L mail on it and trying to find the time (and nerve) to start.

I know its off-subject, but I'm also an amateur programmer, writing a contest logging program (shareware) using an antique version of Borland's TurboBasic and would like to get it to key the CW rig from the serialport . . . . . and I've got a problem.

Turbobasic has an 'OPEN' command that (followed by parameters for baud rate, etc) can open access to either COM1 or COM2. This command only 'opens the channel' and doesn't change anything at the port, so I need to know how to turn on (and off) the computer's DTR line to key the interface.

Back in the 'Commodore-64' days, it was a poke to a memory location that toggled the user port voltage on and off. I have been able to find nothing concerning machine language 'pokes' from the IBM basic(s) and have seen nothing that leads me in another direction..... it is a 'poke' - isn't it?

The screen layout, CW access, message memories, and the rest of the work cannot begin until I find out how to key the rig! Any information would be greatly appreciated.

72,

Harry Bump, KM3D   QRPARCI
PO Box 392   NORCAL
Richland, PA   17087   OWL

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: "rohre" <rohre@arlut.utexas.edu>
Subject: [2405] Do it yourself test for plastic materials
Message-ID: <n1391262848.96300@msmailgw1.arlut.utexas.edu>

If you are concerned with what a certain plastic material will do under RF influence, there is a very QRO test most of us can do at home.

Take a glass cup of water and place it in your microwave; (the most popular sizes of kitchen microwaves today are 750 watt units, thus this is a QRO experiment).

Ob QRP: those who just can't EVER use QRO, may do this test with the smaller "apartment" microwaves.

Take a paper towel or paper plate and place your piece of test plastic upon it and inside the microwave next to the cup of water, in the center, or wherever in the box you notice food gets hottest. (SWR at work for good cause).

Set the timer for about 4 or 5 minutes on high; the time it takes your machine to boil a cup of water is what we are after. Set it to high, and stand back.....(This is SOP to avoid steam burns from the water:-)   Safety first.

When the water boils for a few seconds with a nice rolling boil, turn microwave off, and with a wetted end of a finger, touch the plastic under test (Watch out for the cup of now boiling water).   If it is NOT hot, you have a suitable RF plastic. Remove test subject and cup of hot water and prepare your favorite hot beverage with the boiling water, and sit down and contemplate what a nice RF form the plastic will make---if it did not heat up.----   If it got hot, clean up FAST before your chief of kitchen finds out what is smelling up the microwave.

72, Stuart K5KVH
rohre@arlut.utexas.edu

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: David Adams <dave@flowserver.stem.com>
Subject: [2293] DVM for sale
Message-ID: <9601050343.AA02284@flowserver.stem.com>

Posted for a friend for those whose test benches are a bit low.

Beckman Tech 310 digital multimeter. Basic functions plus
diode test. Nice solid carrying case.

$40

dave

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Larry East <LVE1@inel.gov>
Subject: [2384] KC-1 and Argonauts
Message-ID: <9601051821.AA13211@garnet.inel.gov>

The TenTec 505 and 509 (and probably 515) rigs use *different* VFO ranges
for each band (!). This makes it a bit inconvenient to add a frequency
counter that works off the VFO since it would have to have a different
offset for each band; I don't know if this is possible with the KC-1. Don't
know why TenTec took this approach... maybe crystals were a lot more
expensive back then or something!

72/73, W1HUE

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: George.Gingell@bbs.abs.net (George Gingell)
Subject: [2389] Milliwatts & KMWA
Message-ID: <1996Jan05.115822.8207@abs.net>

Chuck K5FO, Gave us some good scoop on the KMW Awards and the interesting
facts on Range of Errors in our Power calculations. However, some of the A.R.
types mentioned, have the answer to the Error in Distance Calculations.
It is called GPS. Now all we need is $$$ to buy a case of them. 1 per Local
QRP Club would probably take care of it. Maybe we can get a group buy on

them.
I see the Magellan 2000 is down to $200 now.

In the interm, maybe we can get someone to keep track of the 6 digit Grid Squares for everyone who applies for KMW Awards. Chuck ?

I would like to have input from all of you who are interested in Milliwatting.
If you send me your Name, Callsign, QTH, Latitude/Longitude or 6 digit Grid Square, e-mail address,snail mail address, and telephone number (optional), I will include your information in the Maryland Milliwatt Club Database of QRPp Stations. We can use this to help make the awards more meaningful. We probably should include some notes in the database (Card file?) with what Equipment and Antenna(i) that you are using.

I really like the idea of Chuck trying to match up the Historical Propogation data with the KMW Awards. We don't always realize that we are doing contributing
to meaningful propogation research every time we make a low power contact.

Don't forget to keep WO3B, "Milliwatt BoB" advised of your QRPp activities. He needs your input for the column in The QRP Quarterly Journal.

QRP DX TU (C)1986, G. Danny Gingell,K3TKS@bbs.abs.net

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George Gingell, user of the UniBoard System @ abs.net
E-Mail: George.Gingell@bbs.abs.net
The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA
Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking

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From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: dgf@netcom.com (David Feldman)
Subject: [2403] MIZUHO HT range xtals from ICM (LONG)
Message-ID: <199601052135.NAA16017@netcom4.netcom.com>

PLEASE FEEL FREE TO REPRODUCE/COPY THIS FILE, BUT PLEASE KEEP IT INTACT BECAUSE IT WON'T BE VERY HELPFUL IF THE FILE ISN'T COMPLETE. ALSO PLEASE KEEP THE REVISION DATE WITH THE FILE TEXT SO IF I GET SOME UPDATES AND RE-PUBLISH IN THE FUTURE YOU'LL KNOW WHICH VERSION YOU HAVE!

73 Dave WB0GAZ dgf@netcom.com

This file was posted JANUARY 5, 1996 from WB0GAZ at dgf@netcom.com
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Last year I worked with International Crystals to develop a set of "standard" part numbers for the range crystals used in most of the MIZUHO hand-held QRP SSB/CW HF rigs. Through a set of analyze/duplicate/test cycles I got some reasonable results (I guess you'd call the results reasonable - at least they weren't awful!) I spent some good $$ at this - looking back it was a rather crazy project, but I really am a sucker for cute little radios so it was necessary.

Toward the end of 1995, ICM instituted a (rather high) minimum+hourly charge to test/analyze crystals, so I gave my project up once they set that policy in place. At this point I don't plan to try to refine the parameters any more, so I think it's time to post the part numbers as they stand. I do hope to get feedback from hardy soles that actually try to use this info, and based on that perhaps we can make minor "tweaks" and other corrections that will improve the parameter sets. I'd also like to be able to publish a set of frequency-calculation formulas (see below) so if you have access to some of the formulas for the various Mizuho radio models, I'd be most grateful to accept a copy of the info and include it in a subsequent posting.

Please feel free to use this list, but at your own risk, because it turns out Mizuho (in Japan) hand-selects range crystals they have manufactered to get ones that track accurately the frequency dial on the radio. My results have similarly been rather variable, and I don't have the luxury of having a whole batch of crystals made and hand picking the right ones.

It is feasible to have crystals shipped directly from Japan but it's rather expensive (postage, Faxing your order in and getting it confirmed, exchange rates, Yen-denominated cashier's checks, etc.) and some of them (such as for the 2M band, etc.) aren't made anymore at all, and others (such as for the US phone 40M band) aren't made except by special order (really a complicated procedure!)

I didn't investigate the MX-3.5S (I felt the radio was of really limited use in the US as the US phone band is far above where the MX-3.5S is designed), the MX-6S (or AEA DX Handy for 6M) as I didn't have a sample unit, or the MX-18S as my unit arrived with two crystals to cover the entire 18.068-168 MHz band and I didn't want to spend the $$.

Please note that for 15, 10, 6 and (possibly) 2 meters there are actually two different flavors of Mizuho radios. The "S" suffix units have 1-2 watts of output power, were sold only assembled, and use a 11.2785 MHz IF. They are the more common types. The MX-15, MX-10, MX-6Z, and MX-2 units (no "S" suffix) are 1/4 to 1/2 watt, were sold either kit or assembled, and use a 7.795 MHz IF. I have no idea why two different IFs were necessary (maybe cost?) but the range crystals are COMPLETELY different. You can't use a

MX-10 range crystal in a MX-28S even tho both radios are intended for the 10M ham band. The AEA DX HANDY for 10M is also called MIZUHO MX-28S. There is a 1 watt 2M rig (the Santec LT-202S) running around but I've never seen one, so I couldn't try to get crystals made for it. If anyone wants to sell me their Santec LT-202S.....

!!! IMPORTANT !!!
!This info DOES NOT include the formulas needed to calculate a crystal's
!frequency given the range you want to cover. For that, you're on your own.
!I discovered also (much to my chagrin) that some of the rigs don't seem to
!have a completely linear relationship between target range and crystal
!frequency, at least as well as I could determine, and some of my attempts
!backfired (off by 5-10 kHz from desired range). The ways I found to pick
!a crystal frequency were either (1) work backwards knowing the desired
!coverage and the radio IF and crystal multiplication factor, or (2)
!interpolating/extrapolating a known crystal onto a new frequency knowing
!the crystal multiplication factor. The one thing I can tell you is that you
!derive the crystal frequency by specifying the TOP END of the desired
!coverage range (i.e., if you want to cover 21.150-21.200, you use 21.200,
!the IF, and the multiplication factor for that particular radio to obtain
!the crystal frequency required). IMPORTANT: ICM DOES NOT HAVE THE NECESSARY
!FORMULAS - THEY ONLY WILL BE ABLE TO PROCESS AN ORDER WITH A PART NUMBER
!AND AN ALREADY-CALCULATED FUNDAMENTAL FREQUENCY THAT YOU SPECIFY. PLEASE
!DON'T PRESS THEM TO DO OTHERWISE AS THEY **DON'T** HAVE THE REQUISITE
!INFO ANY MORE THAN I DO! In a later version of this file, if people can
!pull together the necessary formulas based on documentation they may have,
!then this situation will probably improve (that is, if you have written
!formula docs from MIZUHO on your radio(s), then please copy me and I'll
!include in this file for a later posting). Also, if you have some "REAL"
!Mizuho crystals in your equipment, if you let me know the standard Mizuho
!part number (i.e., 14X20S) and the frequency stamped on the crystal, I'll
!accumulate a table of frequencies and that should simplify the ordering
!process by eliminating the calculation step altogether.

The range crystals are all fundamental types, and usually have 60 pF load capacitance (yes 60, not 32), and there is another parameter that ICM calls "C1" which determines the amount of "pullability" of a given crystal - that is how far it will cover in the VXO circuit. If you don't specify this parameter when you have a crystal made (that is, if you specify only the frequency, holder and load capacitance) then ICM will choose a "C1" value by default which is usually much too low. I think this is what has lead to frustration in some prior efforts at getting range crystals made - the resulting crystal would cover (say) only 30 kHz of the band rather than the desired 50 kHz. My first ICM crystals had this problem, along with some crystals I have that were made by JAN CRYSTAL. I chose ICM for this project because I got very good support from one of their engineers.

Anyway, after considerable thrashing/expense/time ICM and I concocted 8

"standard" part numbers that are reasonable attempts at getting sufficient VXO coverage. Some of the formulas seem to overshoot (beyond the lower end of a given range) but that's not entirely bad - the radio's don't have digital readout or even very fine mechanical readout, so it's a bit of a shot in the dark. I'd suggest before actually putting your MIZUHO on the air with any given crystal that you pre-test it on a frequency counter and make up a little table that maps the (5 kHz) knob divisions to the actual frequencies you get with your particular radio and crystal.

The MIZUHO radios don't have an elaborate set of adjustments to help each crystal properly track the knob markings. There are no independent trimcaps for the crystals. You plop in your crystal and pretty much take what you're given.

If all of this sounds like too much trouble and you want a SSB/CW HT for HF, then the only other choice I'm aware of is the Tokyo Hy Power HT-750 (see October 1994 QST page 60 or so).

Anyway, here are the part numbers I have and the results of the LATEST test crystal I had made. As you can see some of the crystals didn't meet the mark, but perhaps you can improve on it...

(RESULTS OF LAST TEST ATTEMPT)

ICM #	Description	Attempt	Actual	Freq
725677	MIZUHO MX2 T/R 144 MHZ BAND	PENDING (update next time)		
725678	MIZUHO MX15 T/R 21 MHZ BAND	21.250-21.300	21.255-303	9.70513
725679	MIZUHO MX14S T/R 14 MHZ BAND	14.300-14.350	14.282-352	12.81307
725680	MIZUHO MX7S T/R 7 MHZ BAND	7.175-7.200	7.167-197	9.23975
725681*	MIZUHO MX6Z T/R 50 MHZ BAND	50.090-50.140	50.082-141	(later)
725682	MIZUHO MX10Z T/R 28 MHZ BAND	28.350-28.400	28.333-391	12.06667
725683	(not part of this series)			
725684	MIZUHO MX21S T/R 21 MHZ BAND	21.250-21.300	21.257-299	16.29025
725685	MIZUHO MX28S T/R 28 MHZ BAND	28.400-28.450	28.403-450	13.24283

*NOTE! THE MX6Z IS *NOT* THE SAME AS THE MX-6S. DON'T TRY TO USE THIS FOR-MULA FOR YOUR AEA DX HANDY/6 METERS - IT WON'T WORK AT ALL DUE TO DIFFERENT IF.

There you have it. This posting implies no relationship I have with ICM other than being a customer for this project. If you have another way of getting range crystals, I'd be interested in hearing of your experiences so I can add information to this file and post it again. Also, you CAN get most of the common range crystals from Japan if you're making a trip over there.

P.S., you may wonder if I have some of these radios.
Yes, I do.
No, they're not for sale ;-)

Good luck!

73 Dave WB0GAZ dgf@netcom.com

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Steve Bornstein <saborns@freenet.columbus.oh.us>
Subject: [2367] Oak Hills Rigs For Sale
Message-ID: <Pine.3.07.9601051051.A1092-a100000@acme>

Hello Gang,

I have decided to go for a multi-band QRP but need to sell some of my mono-band Oak Hills rigs. All are pristine and with all manuals. I will ship.

OAK HILLS QRP RIGS FOR SALE

20 Meter Spirit with keyer	$140.00
40 Meter Explorer with Keyer	75.00
80 Meter Spirit	60.00
30 Meter Spirit	60.00

If interested contact: Steve Bornstein K8IDN
(614-263-5819 or e-mail
Columbus, OH

73, Steve K8IDN

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Steve Miller <kg7pv@teleport.com>
Subject: [2411] OHR keyer and IF Hiss Mods
Message-ID: <199601060158.RAA06530@desiree.teleport.com>

Well I never did like the way my old OHR keyer was weighted and Jess N0TFI was right on, replaced the 56K resistor with a 5.6k (he used a 5K but 5.6 was as close as I could get from the junk box). Boy, do I like it better this way! I use it as a master keyer for all the qrp rigs in the shack, one box with a switch to select the rig - makes switching rigs so much easier. I built the OHR Spirit II 30 mtr from the group buy and wonder if the IF Hiss mod being discussed would work on it - I think that the basic designs are similar....?? Has anyone done this, how'd ya do it and how'd it work? 73

Steve Miller KG7PV
Norcal # 308, QRP-L #109

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Steve Bornstein <saborns@freenet.columbus.oh.us>
Subject: [2390] OHR Rigs For sale
Message-ID: <Pine.3.07.9601051400.A23966-8100000@acme>

The 40 meter rig has been sold.

Still have the: 20 meter Spirit w/keyer for $140.00
                80 meter Sprint for 60.00
                30 meter Sprint for 60.00

73, Steve K8IDN QRP-L #331

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: wmcshan@REX.RE.uokhsc.edu (Mike McShan)
Subject: [2375] OHR WM-1
Message-ID: <9601051609.AA19989@rex.re.uokhsc.edu>

Is the OHR WM-1 wattmeter essentially the same design as the W7EL meter
described in the ARRL book QRP Classics?

Thanks for the info and 72/73,

Mike N5JKY
QRP-L #300

W. Michael McShan, Ph.D.
Research Assistant Professor
Department of Microbiology and Immunology
University of Oklahoma Health Sciences Center
940 S.L. Young Blvd.
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405-271-1202 Laboratory

405-271-3117 FAX
405-478-7670 Home
wmcshan@rex.re.uokhsc.edu

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: George.Gingell@bbs.abs.net (George Gingell)
Subject: [2391] QQ,QRPp & SPRAT
Message-ID: <1996Jan05.120011.8207@abs.net>

Larry East, W1HUE asked about delivery of QRPp & SPRAT.

I received The QRP Quarterly Journal (QQ), and SPRAT the last week of December, but still no QRPp in sight. Not complaining (Yet), just worrying.

I was hoping to read about the St. Louis Antenna Tuner before I ordered one, but I couldn't take a chance on waiting that long. They might be gone before I could get my order placed.
FYI- Attention! - Jim Cates, The check is in the mail.

I hope the case is the same as my new Sierra. My new Blue Baby is almost QRV, I only need a little time (This weekend?) to build the band modules and the KC-1 Counter/Keyer. Do I sound anxious? Michigan QRP Test is coming up, or did you forget?

It looks like I will have 2 new Wilderness rigs to bring to the QRP Show es Tell this time.

Mike C., WA8MCQ, Bruce, W6TOY, Myself and a few others are planning to have another Maryland Milliwatt Club "QRP SHOW ES TELL" in the very near future. End of January or Mid February. Details to be announced shortly.

QRP DX TU (C) 1986, G. Danny Gingell,K3TKS@bbs.abs.net

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George Gingell, user of the UniBoard System @ abs.net
E-Mail: George.Gingell@bbs.abs.net
The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA
Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking

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From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: litigate@mi.net (litigate)
Subject: [2383] QRP RIGS and COMPUTER NOISE?
Message-ID: <199601051817.OAA10456@itchy.mi.net>

I've been out of QRP for 15 years and want to get back in. I used to own an HW-8 and an Argonaut 509. I
have a packetcluster node here in the shack and am wondering how the older rigs handle computer noise?

****
* Rick Williams VE9HF *
* 472 Broad St.   *
* Fredericton, NB   *
* E3A 5L1 CANADA   *
****

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: QLF%mimi@magic.itg.ti.com
Subject: [2365] QRP-L
Message-ID: <9601051501.AA05124@itg.ti.com>

From: Brad Bradfield   QLF

Subj: QRP-L

re: KO6KA's comment about possibly starting a seperate antenna oriented list server.

As a died in the wool antenna spook (my words, my wife calls me something else) I'd love to see an antenna related list. However, there's no reason the qrp-l shouldn't be able to coexist with ongoing discussions in several areas. I see no reason to make the list to narrow or specialized.

And, yes, I'm receiving the "thousands" of AutoResponse messages too.

73's

Brad, WB0CGH

****

ARRL Life Member   QRP-L #377   SMIRK #4906   IEEE (M)

Brad Bradfield, PE
108 Forestwood
Corinth, TX 76205

QLF@MSG.TI.COM

WB0CGH@WO5H.#DFW.TX.USA.NA

****

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [2381] Saturday es Sunday
Message-ID: <199601051802.SAA14164@chuck.dallas.sgi.com>

Gang,

Just a reminder that tomorrow a lot of clubs around
the country, NorTex, CQC, AZ ScQRPions, to name just
a few. Plan is to get on the air before-after-during
meetings to try to run others down. So start at
the highest band open and work your way down through
all the QRP hailing frequencies.

I personally will be at the NorTex Club until after
lunch and then I'm getting on a jet airplane to go
out to the NorCal meeting tomorrow. This is serious
business attending as many meetings as one can in one
weekend. :-)

I will carrying a NorCal 40a, the one from NorCal not
the one from Wilderness Radio. The first person that
comes up to me with a picture off Franklin on an
official US document for monetary exchange can have this
beautifully built puppy right then and there. I have
come to the point in my life where I have made my point
and have got to make space for new toys as they come out.

I have directions from Mt View to Livermore, been there
done that. Someone tell me if I should bring a sweatshirt
or is it sunny and beautiful in NorCA.

I'll have another rig for 30M to operate from the hotel

room. I'll check the antenna situation before I announce
times and freqs.

dit dit es happy new year to all and to all a good day/night

p.s. anyone wanna set up the meet for Two Guys Restaurant
just holler
--
Chuck Adams (K5FO CP-60) adams@sgi.com
Box 181150, Dallas, TX 75218-8150

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: "Richard Hieber" <Richard.Hieber@rrze.uni-erlangen.de>
Subject: [2374] SK3 and touch paddles (long!)
Message-ID: <E0A321786A@isis.rrze.uni-erlangen.de>

Hi gang,

there's been much talk recently about the CMOS Super Keyer 3 on this
list, but I simply have to join the chorus: It's great! I received it at
the 31st of December last year, built it on the January 2nd and have
been playing with it ever since ;)

The other keyer that I own is based on a 8749 chip and has a good
reputation in the local ham community. I always thought this one is
probably the best keyer on the market. But the SK3 beats it hands
(paddles) down!

Some questions

OK, enough ranting. There are a few very very minor things that are
unclear to me.

1) If I press button 5 and 6 to enter the inquiry mode, then paddle in a
   command, *sometimes* there is no response. When I repeat it, there is
   always a response at the second try. Do others experience the same?

2) Is there an inquiry function to find out what the current speed is?
   The R command only gives the range which can be varied by the 100
   kOhms pot.

3) Currently I am powering the keyer with a 9V battery. The
   voltage is reduced to 5.4 Volts with a resistor and a Zener diode in
   series. (This is only a temporary setup - I will probably buy a 6V

Lithium battery for it and drop the voltage with a diode or a LED). The battery that I am using is probably weak and I suppose the voltage has gone a few times below the minimum 3.5 Volts. I noticed corruption of a few configuration parameters as an result. The text memories didn't seem to be effected.

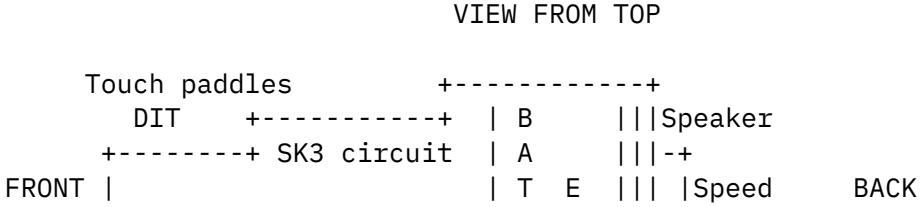
I am *sure* this is only because of the barbaric power feeding arrangement, having the SK3 in parallel with a 5.4V Zener - and I don't even have a meter here to measure if this is the real voltage the keyer is seeing. I might think the standby current running through the zener is too low really to keep the voltage stable, especially when the sidetone is on and draws additional current. Due to an car accident three weeks ago, I don't have any instruments at my study QTH right now and have to make do with what I find in the clubstation - that's the reason for the temporary setup.

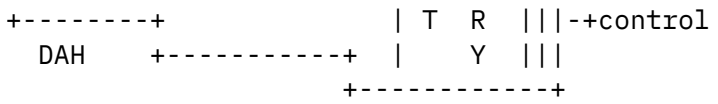
I don't have any real contest experience so far, but this weekend there is a contest from the German CW club AGCW-DL, and I am thinking about participating to make use of the new toy ;) I will be using my high-quality Schurr paddles and the QRP+.

After a sufficient period of playing with it, the SK3 will find its future working place in a companian box for the QRP+, together with the Schurr paddles, with a big gel cell and a QRP tuner. This was the idea why I ordered the kit. But after having seen how small and how good it is, I am tempted to order another kit and make a standalone keyer out of it.

Touch paddles

For this one I would like to have touch paddles. I plan to mount them on the first half of the sides of a small case, with just enough space for the SK3 circuit board, a battery, a minature speaker, the speed control pot and the circuit for the touch paddles. The six memory buttons will be mounted on top. The base plate will be something heavy to keep the keyer on the table ... but I could always hold it at the back part with with my right hand (I am keying with the left). I imagine the shape of the keyer to be conical but not necessarily in steps like in this small diagram (couldn't do better with ASCII):





Some more questions

I once built touch paddles with a few cheap CMOS chips. The working principle was the conductivity of the skin, and that has inherit problems. One is that to measure conductivity, you need two points of contact. So it wasn't enough to touch the plates with thumb or finger, in addition to that the hand had to rest on a base plate. Moreover, if my hands were extremely dry, it worked erratically. Luckily normally the excitement of a CW conversation keeps my palms quite moist! ;)

I have heard about other principles. How exactly do capacitive touch paddles work? I haven't heard excited reports about it so far on the list, only a passing mention from time to time. Do capacitive touch paddles work *really* well for somebody? Please tell me ...

I searched the archives and found a mail from Robert Gobrick (Bob), VO1DRB/WA6ERB, from 16 Nov 1994:

> I am still working on a project of mounting the Curtis keyer in a little
> case and mounting a pair of $4 Ramsey capacitance-touch paddles and
> circuitry in the same case - that would make it small, light and cheap.
> I have used touch paddles before (have a paddle called the Copperhead
> that was in May 1991 73 magazine and it really does work half way
> decent.

I think the Copperhead design works on the resistive principle, but how about the Ramsey paddles? Do they work well? - I am not really looking for a commercial kit, but rather for a good, small, reliable design that I could reproduce myself. Low power consumption is essential.

In another archive mail from 10 Apr 1995, Joe E., N2CX, <JEVERHART@cayman.VF.MMC.COM>, wrote:

> Briefly, the "Copperhead" Keyer and a few others like the Ramsey kit are
> not true "capacitive" paddles, they rely on skin conductivity and/or
> stray filed pickup from local electrical lines conucted throught the
> opoerator's body. They can be very very sensitive to changes in
> humidity, skin conductivity ambient electrical fields, etc. Although I
> have used one off and on (no pun intended) for the last couple of years,
> I don't recommend them.
>
> The design from SPRAT is probably better, but I haven't tried it. The

> best approach I've seen is a digital desing I saw when I worked for the
> Pulsar watch folks in another lifetime. It compared the delay in two
> signal paths one of which had a capacitive touch plate. When the touch
> plate was contacted by a finger, the extra capaictance added to the
> delay in that path which was sensed by digital circuitry. The result was
> a very stable repeatable touch sensor. AND it was tested for no damage
> up to 50 kV. If I get achance, I'll attempt to dig up the circuit and
> share it with the list.

Joe, I'd be very interested to learn more about it. It might be not easy
to reproduce though - I don't know. Can I expect something *simple* to
work repeatable? I'd also be interested in other principles. Someone
once mentioned an optical keyer written up in QST where you tap your
finger between a light beam. A friend of mine suggested tension strips
as something to put some research into.

Hope I didn't put somebody off with such a long mail. The other ones
that I read this afternoon were so much shorter (AutoResponse from
NULL@synapsis.it).

72,
Richard
--
Richard Hieber, DL8MFQ/AA8CP
EMAIL: Richard.Hieber@rrze.uni-erlangen.de

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: David Johnson <djohnson@acpub.duke.edu>
Subject: [2400] Sunday Night Net !!
Message-ID: <Pine.SOL.3.91.960105162207.4762A-100000@bio7.acpub.duke.edu>

Gang:

Everyone is invited (as usual) to check into the Sunday
evening QRP net. I am scheduled to be net control station
this weekend, and hope to hear many of you on 3560 (+/-
qrm) starting at 10pm local (that's 0300 UTC Monday
for the North Carolina-time impaired ;-)

This net started as a way for those in the Triangle, NC,
and surrounding areas to get together, but stations from
all locations are welcome (even had a station check in
from Espana - as in Echo Alpha !!).

So get that rig fired up, and join in the fun!
(qro ok too, but qrp better!!)

72,

Dave

David W. Johnson
Amateur Extra WA4NID. Low power enthusiast!
email: djohnson@acpub.duke.edu

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: "John Foote" <John_Foote_at_HDN-BCSE@ccgate.ml.nec.com>
Subject: [2404] Twin-lead loop antenna
Message-ID: <9600058208.AA820888743@mvlsmtp.ccgate.ml.nec.com>

> Last night I thought I would whip out a 40 m twinlead loop so I cut up some cable according to the chart in Bob's eMail.
>
> Using an MFJ 259 I started pruning. Didn't get to where I wanted to be before finding that there was no more stub left to cut (open OR shorted). It was impossible to find resonance because the antenna impedance at any freq. between 4 and 9 MHz was so far off the SWR meter never came down from infinity.
>
> A little fiddling with the MFJ and an interesting phenomenum -- At 21.329 MHz the SWR was 2.0 to 1 ! So, I conclude, it must resonate at 7.109. But the meter still wouldn't come off the peg at that freq. Then, no more stub.
>
> I'm not done, but it's obviously going to take a while to get this thing in useful condition.
>
> de KR4GL
> John Foote

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: hysell@kodak.com (John D. Hysell)
Subject: [2301] UNIDEN 2510 mod for 26-28 MHz
Message-ID: <9601051229.AA16932@runner.itc.Kodak.COM>

Jacqueline writes:

> Included in the manual were instructions for modifying the rig for
> 26-28 MHz. I find this quite nauseating and am wondering if Uniden
> or the dealer included this page. Shame on one of them. (I bought
> the rig second hand from an OT ham so I know he didn't insert these
> mod instruction.)

Actually, there is a darn good use for this radio modified to permit "out-of-band" operation - If you also drop the output to milliwats, it makes a fine driver for transverter operations. So don't be TOO sure the OT ham who sold it didn't include the mod instructions as a gift to you...

-John
KF2XC

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: s0962880@rsrz14.hrz.Uni-Marburg.DE (s0962880)
Subject: [2377] unsubscribe s0962880@stud-mailer.uni-marburg.de
Message-ID: <9601051650.AA25495@Stud-Mailer.Uni-Marburg.DE>

unsubscribe s0962880@stud-mailer.uni-marburg.de
:wq

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Dennis Blanchard <djade@hampstead.k12.nh.us>
Subject: [2399] Using PVC in antenna designs
Message-ID: <Chameleon.4.00.960105161111.djade@K1YPP.hampstead.k12.nh.us>

Generally PVC is quite adequate for antenna work, but a few precautions are necessary.

First of all, contrary to common knowledge, it actually does have reasonable RF properties. Most samples I have have looked at have dielectric constants of between 3.3 and 3.7 at normal temperatures and dielectric voltage breakdowns of 350 volts/millimeter are common.

Since I am involved in manufacturing a line of antennas that use this material, I did a fair amount of investigating. One of the important factors to consider when using PVC for antennas is whether it can take the Ultraviolet radiation from the sun. There are chemicals that can be added to the compound to protect it and many manufacturers do this routinely, since one never knows where the stuff will end up. This is particularly true of present day white PVC. Not all are protected, but one brand name that comes to mind that is: Bristol Pipe PVC, schedule 40.

Where one can get into trouble with PVC with RF is in the helical antenna arena. Here we have an antenna that can resemble a Tesla coil, if there is sufficient power and inductance. With very tight windings and not much radiating surface considerable voltages can be developed. The highest voltage point will be at the end of the antenna. With even moderate powers; 50 to 100 watts, several thousand volts can be developed.

Take for example the case where a helical antenna developed 1000 volts at the end. The formula for power is P= E^2/R (Power is E squared over R). 1000 Volts squared over perhaps 100,000 ohms can be 10 watts! If this power is concentrated in a rather small area it will start to heat the plastic. This heat will further reduce the voltage resistance of the plastic, increasing the heat and further deteriorating its ability to resist voltage breakdown.

The estimate of 100,000 ohms was pulled out of the air. Actually, it is usually higher, but contaminants in the plastic and gas molecules in the material can drastically affect the outcome. Regional heating can become severe.

DC voltages do not have quite the same effect on these materials because of the reaction the plastic has to AC. This is in great part due to the inherent "dipolar" characteristic of the plastic. AC tends to force the molecular dipole characteristic of the material to react to the direction change of the current, this is not resistance, but can have a similar end result.

The bottom line here is that these problems only occur at very high voltages and particularly at elevated temperature. When used for a coil in a bottom loaded, or even center-loaded, the voltages remain low enough that there should be little reason for concern.

Varnished wood works well because it has very little dipolar effect, although it does have some. The problem with the wood is that as the varnish deteriorates over time, moisture will find its way in and dramatically upset the apple cart.

When I wrote the article for QST in July, the staff at the League had me submit some test data because they had the same concerns. We also submitted a 144 MHz JadePole antenna for testing. They were pleased with the results and found no problems. At reasonable power levels there is little need for concern,

especially at QRP levels. Once again QRP can have an advantage.

Many of the PVC materials can be used out beyond 1 GHz without concern.

Dennis, K1YPP

Jade Products, Inc.

Engineer

Name: Dennis Blanchard
E-mail: djade@ra.hampstead.k12.nh.us (Dennis Blanchard)
Engineer for Jade Products, Inc., supplier of kits and antennas.
WEB page: http://www.hampstead.k12.nh.us/~djade/

K1YPP

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Harry_Chase@smtpgwy.windata.com (Harry Chase)
Subject: [2396] VHF LIST INFO
Message-ID: <9600058208.AA820882950@smtpgwy.windata.com>

To all who asked me directly about the VHF reflector: (there were many so I'm posting to the list!)

Send to <vhf-request@w6yx.stanford.edu>

and put SUBSCRIBE (yourcall) in the body of the message. It should send back the FAQ and welcome. The VHF list is for VHF and higher bands operating, contesting, and technical discussions. Emphasis is on SSB/CW operation.

...and to keep this to the QRP subject, most of the activity above 2300 MHz is QRP - by necessity!!! Power gets expensive or unwieldy up there!

Harry
WA1VVH

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: JKXM17A@prodigy.com (ALLEN SMITH)
Subject: [2294] What he wants in a kit
Message-ID: <091.07956571.JKXM17A@prodigy.com>

I would not quibble about most of those attributes Brad would like to see
in his dream-come-true QRP kit except one:

Why in the world would you want enough audio output "...to drive other
people crazy."??? I didn't think that was the point of our hobby.

Quietly in Colorado, Allen - AA0YU

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: "Lau, Zack, KH6CP" <zlau@arrl.org>
Subject: [2369] WO3B's QQ mW column
Message-ID: <30ED46D7@arrl.org>

Bob has an interesting idea--summing your power for each
contact. What about summing the power for *both* sides of
the contact? Working all states with 1 watt on both sides works
out nicely to 100.

As an amazing coincidence, 85 of my QRPp DXCC #9
contacts were made with 720 mW, or 0.72 watt! This was
in 1982 to 1984. An old list indicates 56 confirmed countries
on 20 SSB with 1watt PEP out of my Argo 515. The 204B at
the U of Penn club station really did a fine job (4 el monobander
at 100 ft).

Zack KH6CP/1   zlau@arrl.org

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [2372] WTB: Oak Hills WM-1 Wattmeter
Message-ID: <Pine.3.89.9601051059.C3808-0100000@w3eax.umd.edu>

Either in kit form or built, I'm looking for either. If I can't find
I'll buy a new one during the next group purchase.

Scott Rosenfeld NF3I Burtonsville, MD FM19 QRV 40-10/6/2/440
** Yes, you CAN do VHF contests with 25W and omni antennas **
Still stuck at 138 countries confirmed on HF w/dipoles...
72 & 73 from suburban DC 301-549-1022 (h) 301-982-1015 (w)

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Rick Zabrodski <zabrodsk@med.ucalgary.ca>
Subject: [2395] Re: 25 w linear amp
Message-ID: <Pine.SUN.3.91.960105130358.18429G-100000@ume>

It was minus 30 deg celsius this am.....blue skies however ;-)
We don't need amps here.....electons fly faster when super cooled!

Dr. Rick Zabrodski BSc, MD, CCFP(E) * VE6GK
Clinical Assistant Professor * NorCal 519 ARCI 7650 GQRP 8329
Faculty of Medicine, Univ. of Calgary * "Power is no substitute for skill"

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Jacqueline Herman <jherman@sierra.net>
Subject: [2408] Re: 25 w linear amp
Message-ID: <Pine.SUN.3.91.960105150805.11259B-100000@diamond>

On Fri, 5 Jan 1996, Brien Pepperdine wrote:
> Anyhow, seeing as I raised the issue of an amp for qrp before, I do have

For some reason this reminds me of the debate on here a couple years ago
concerning whether we should measure our QRP output from the xmtr or
from our ERP. Some folks (falsely) felt that 5W output into a "gain"
antenna was no longer QRP (for contest pruposes).

Oops - hope this isn't misconstrued as "flame bait"! =:O

73 from Hawaii (I'm DX!),
Jeff NH6IL

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: drichff@nando.net
Subject: [2328] Re: AutoResponse
Message-ID: <199601051357.IAA18781@parsifal.nando.net>

Has anyone else been receiving the following message?

"User not reachable. SMTP account disabled"
I have received 8-10 of these messages from NULL@synapsis.it

Dwayne "drichff@nando.net"

Firefighter-3 / N.C. EMT   / Basic Rescue Technician
Fire Patch Trader   / Carolinas Fire Page (Disp.701)
Appalachian Trail Hiker (Trailname "BACKDRAFT")
Ham Operator KC4ADW   QRP-L #336
" Strive for Perfection, Settle for Excellence"

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Electronic Design Magazine <dmalinak@CLASS.ORG>
Subject: [2344] Re: AutoResponse
Message-ID: <Pine.SUN.3.91.960105062301.819A-100000@class.class.org>

Only 8 to 10? I'm now up to 35 as of 9:26 EST!
Whoever or whatever is posting this...knock it off. It's not funny.

David N2SMH

On Fri, 5 Jan 1996 drichff@nando.net wrote:

> Has anyone else been receiving the following message?
>
> "User not reachable. SMTP account disabled"
> I have received 8-10 of these messages from NULL@synapsis.it
>
> Dwayne "drichff@nando.net"
> ---
> Firefighter-3 / N.C. EMT   / Basic Rescue Technician
> Fire Patch Trader   / Carolinas Fire Page (Disp.701)
> Appalachian Trail Hiker (Trailname "BACKDRAFT")
> Ham Operator KC4ADW   QRP-L #336
> " Strive for Perfection, Settle for Excellence"
> ---

>
>

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: NYOUNG@desire.wright.edu
Subject: [2368] Re: Autoresponse
Message-ID: <01HZNCHQSBOU95NLF7@desire.wright.edu>

Man, and people get on my case for obnoxious and
overlong repititions of ignorant blather! Maybe I
should change my name from Nils R. Bull Young
to Null Response Bull Young. Hmmm... Like would
that like make me famous, heh heh heh heh....
Heh heh heh famous... famous heh heh ... famous
is like cool... Heh heh or something.

I counted about 40 autos here.

So there.

73
Nils
WB8IJN
(And yeah, let's split the list. This list and a list
for those who wanna split the list. Any list.)

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
Subject: [2371] Re: AutoResponse
Message-ID: <96Jan5.105129est.14493-2+25@hooch.CC.Lehigh.EDU>

> User not reachable. SMTP account disabled

  The problem has been corrected, the offender has been terminated, etc, etc.

73
Jim N3VXI

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996

From: Jacqueline Herman <jherman@sierra.net>
Subject: [2376] Re: AutoResponse
Message-ID: <Pine.SUN.3.91.960105081935.15476B-100000@diamond>

It's obvious that an "endless loop" has been generated between qrp-l
and synapsis.it - a simple note to the postmaster and root@synapsis.it
will take care of the problem.

> Only 8 to 10? I'm now up to 35 as of 9:26 EST!
> Whoever or whatever is posting this...knock it off. It's not funny.
> David N2SMH

"AutoResponse" means it's being done automatically, David.

Jeff NH6IL

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: David Negaard <draagen@ConnectNet.COM>
Subject: [2394] Re: AutoResponse
Message-ID: <199601051950.LAA00241@forge.connectnet.com>

>>>>> "Electronic" == Electronic Design Magazine <dmalinak@CLASS.ORG> writes:

Electronic> Only 8 to 10? I'm now up to 35 as of 9:26 EST! Whoever or
Electronic> whatever is posting this...knock it off. It's not funny.

This is probably a mail-host system. I would interpret the message to
mean that the account of the person who 'subscribed' to the list has
been taken down, perhaps because of violations.

Electronic> David N2SMH

Electronic> On Fri, 5 Jan 1996 drichff@nando.net wrote:

>> Has anyone else been receiving the following message?
>>
>> "User not reachable. SMTP account disabled"

>> I have received 8-10 of these messages from NULL@synapsis.it
>>
>> [...]

--
David Negaard   o San Diego District Youth Executive

625 Shenandoah Avenue   o aquarist
San Marcos, CA 92069   o linux-phile
draagen@connectnet.com   o 73 de KB0PXK

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Frank G3YCC <frank@yorks.demon.co.uk>
Subject: [2409] Re: AutoResponse
Message-ID: <ScD97EAo$a7wEwjN@yorks.demon.co.uk>

In message <199601051357.IAA18781@parsifal.nando.net>, drichff@nando.net
writes
>Has anyone else been receiving the following message?
>
>"User not reachable. SMTP account disabled"
>I have received 8-10 of these messages from NULL@synapsis.it
>
>Dwayne "drichff@nando.net"
>____
>Firefighter-3 / N.C. EMT   / Basic Rescue Technician
>Fire Patch Trader   / Carolinas Fire Page (Disp.701)
>Appalachian Trail Hiker (Trailname "BACKDRAFT")
>Ham Operator KC4ADW   QRP-L #336
>" Strive for Perfection, Settle for Excellence"
>____
>
I'm getting LOADS, what's happening ....?
--
Frank G3YCC G QRP CLUB 042. G QRP Club QRP Master's Award 024.
Packet G3YCC @ GB7HUL.#15.GBR.EU
RSGB and ARCI member.
QTHR any call book. Located Near Hull, Yorkshire.
Chairman of the North Ferriby United Amateur Radio Society.

The butterfly counts not years but moments and so has enough time. - Tagore

---

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Jerry Sy <syjerry@netgate.net>
Subject: [2382] Re: AutoResponse (question)
Message-ID: <XFMail.960105101601.syjerry@netgate.net>

On 05-Jan-96 Jim Eshleman wrote:

>>> User not reachable. SMTP account disabled
>
> The problem has been corrected, the offender has been terminated, etc, etc.
>
>73
>Jim N3VXI
>

isn't it that this list has an automatic feature where if the mail bounces back the subscriber is automatically terminated ? This has happened to me twice before and I had to re-subscribe.

was this feature removed because of complaints from subscribers on how easily they can be dropped from the list for reasons like the mail server was down for 1 hr for routine maintenance, etc.

or is the feature still there but did not catch this legitimate case where the subscription should have been dropped automatically after the first bounced mail.

just curious.

jerry AA3KN

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: PAT DOYLE <DOYLEPS@LAKEHURST.NAVY.MIL>
Subject: [2358] Re: AutoResponse -Reply
Message-ID: <s0ecf1fa.056@LAKEHURST.NAVY.MIL>

The address "NULL@synapsis.it needs to be removed
from the qpr-l list. If this was a valid address,
it is no more and the addressee's server is
sending out the AutoResponse anytime it receives a
message for "NULL."

My message, when the list mirrors it, will
probably cause another AutoResponse.

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: NONE <wynnt@utkux.utcc.utk.edu>

Subject: [2392] Re: CMOS III was Re: MFJ 9040 (long)
Message-ID: <Pine.SOL.3.91.960105140422.19767A-100000@utkux4.utcc.utk.edu>

tom.alldread@minfox.com (Tom Alldread) writes:

>Greetings:
>   Further to earlier post on this subject I have recorded the
>current drawn by my CMOS SUPERKEYER II in various modes.
>
>I connected a digital mA meter in series with my keyer
>battery to measure the current drain and the following is the
>test results (with the sidetone monitor speaker turned off):
>
>KEYER MODE SENDING DASHES: 3.35 milli Amperes
>KEYER MODE SENDING DITS: 3.22 milli Amperes
>KEYER MODE IDLE-FIRST 3 SECS: 2.64 milli Amperes
>KEYER MODE IDLE-AFTER 5 SECS: 0.9 micro Amperes
>   (IE: 0.0009 milli Amperes)
>HAND KEY MODE - KEY DOWN   3.45 milli Amperes
>HAND KEY MODE - KEY UP   2.53 milli Amperes continuous
>FUNCTION MODE   2.61 milli Amperes continuous
>TRANSMIT TUNE   3.19 milli Amperes continuous
>? INTERROGATE MODE   2.72 milli Amperes continuous
>
>With the monitor speaker on in the ~hand key~ mode and key down
>the current increased to 18.45 milli Amperes.
>
>As shown the only time my keyer will go into its power down
>sequence is when it is in the regular ~keyer~ mode.
>Generally the CMOS SUPERKEYER II has served me very well and I
>am pleased with it. Now that I am aware of its power down
>characteristics I will be careful to ensure that I leave it in
>the~keyer mode~ when not in use to preserve the battery life.
>
>In the event that a new version of firmware is written
>possibly a suitable watch dog timer could be incorporated to kick the
>keyer out of the special modes after an appropriate delay. To
>help preserve battery longevity for those that regularly use the keyer
>in the ~hand key~ mode possibly a second power down sleep sequence could
>also be provided for that mode of operation.
>
>It would be interesting to hear from others that make similar
>power drain measurements on their CMOS SUPERKEYER II keyers to determine
>if the characteristics were improved in later versions. Mine is probably
>has the first firmware release as I built it shortly after the article
>was published in November 1990 QST.
>
>73 de VE7TMA

Preston,
    The above data may give a hint as to why you lost batteries in 4-5 months. This is the first time I have seen the current map for the various modes of the CMOS II. To get the 1 1/2 year battery life, apparently it is important to keep the keyer in the "keyer mode" during quiescent periods. I sure would like to see the CMOS III mapped like this.

QRPObj - Hey dudes we're talking extremely low power here at 0.0009 mA.

Best regards,
wynnt

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Pat Taber <ptaber@logicraft.com>
Subject: [2304] Re: Could We Spin Off Two Lists and Refocus QRP-L?
Message-ID: <199601051300.IAA60129@nss2.CC.Lehigh.EDU>

Funny, I was thinking something similar but more along the lines of LETS_SPLIT_THE_LIST-L.
A place where folks can complain about any given thread or the length of messages or what-have-you. It could even serve other lists, since there's not a single list or newsgroup that doesn't have weekly postings protesting some on-going thread.

>>>==>PStJTT

==========
Patrick Taber   Email: ptaber@logicraft.com
Principal Software Engineer   Phone: (603) 880-0300
Logicraft Information Services   Fax: (603) 880-7229
22 Cotton Road   QRP-L: 215
Nashua N.H. 03063   Also known as: KC1TD

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Tom_Jennings <jennings@eng16.rochny.uspra.abb.com>
Subject: [2373] Re: Could We Spin Off Two Lists and Refocus QRP-L?
Message-ID: <jennings-9600051559.AA000111193@eng16>

Hi,
There allready exists an antenna list which people discuss many

of the antenna related topics discussed here. If anybody wants
to subscribe here's how:

Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.
Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-ant".

Have fun and enjoy!

73

Tom, kv2x

Thomas J. Jennings | Tel: (716) 273 7071
Senior Engineer | Fax: (716) 273 7262
ABB Industrial Systems Inc. |
Post Office Box 22685 |
Rochester, New York 14692-2685 |

Internet: jennings@jennings.rochny.uspra.abb.com

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: N5EM@aol.com
Subject: [2386] Re: Could We Spin Off Two Lists and Refocus QRP-L?
Message-ID: <960105133848_107376130@mail02.mail.aol.com>

In a message dated 96-01-05 12:18:26 EST, you write:

>   Its nice to be able to get all this stuff
>in one place; and whenever something you dont care about shows up,
>there is a DELETE function to deal with it.
>
>

I fully agree. QRP is a broad topic. Last time I checked, my pursuit of QRP
involves rigs, power levels, antennas, tuners, contesting, and even ham radio
conventions like Dayton! How could you "functionally" separate this stuff

out to nice, sanitary lists? If we broke the list up, I'd just have to subscribe to all the pieces, but now I'd have several address targets. It wouldn't really matter though. Since virtually all of us would subscribe to all the pieces, a message to any piece would get to all of us anyway. Only difference, when someone posted something that included multiple aspects (and we'd have to kill him when he did), I'd get multiple versions of it.

This is a multifaceted hobby. Many topics are relevant. I realize that some have trouble with large volumes of mail. It is especially critical in foreign countries where they pay for every message whether they want it or not. Face it. The Internet is an AMERICAN creation. It goes everywhere but only here is it available to the average Joe for a small cost (and I think that $10/month is a small cost - yes, I pay for it - it is not provided by my employer). I am glad we have input from hams all over the world. I hope it remains that way. But QRP-L has it's own synergy. It is what it is because it developed that way. I am constantly amazed at how my perspective of ham radio and QRP has changed as a result of being on this list. I "expect" to stay current and have access to expertise on an almost instantaneous basis. How could I ever go back to simply waiting on _The QRP Quarterly_ (see, I did it right) to arrive?

I don't like the idea of trying to reshape the List. Learn how to use, yes. Learn to respond to the sender and not the list UNLESS YOUR COMMENTS ARE REALLY OF A GENERAL ENOUGH NATURE TO WARRANT POSTING TO THE LIST (or if it is humerous - I need the good laugh too). I probably respond to 20 messages a week but only 4 or 5 of those go to the list. Maybe even that is too high.

The most important thing is this. Be in Dayton. I want to see your face and put it with your email address :-)

You too, Nils.

72
Ed

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: flanders@GroupZ.net (Jerry Flanders)
Subject: [2380] Re: CW and computers
Message-ID: <199601051757.MAA115328@nss2.CC.Lehigh.EDU>

Harry Bump (KM3D) said:

>.....I know its off-subject, but I'm also an amateur programmer, writing
>a contest logging program (shareware) using an antique version of
>Borland's TurboBasic and would like to get it to key the CW rig from the
>serialport . . . . . and I've got a problem....
>
>... I have been able to find
>nothing concerning machine language 'pokes' from the IBM basic(s) and
>have seen nothing that leads me in another direction..... it is a
>'poke' - isn't it?
>
>
HARRY IS PROBABLY NOT THE ONLY ONE WHO WOULD LIKE TO KNOW HOW TO DO THIS, SO I AM POSTING THIS TO THE REFLECTOR FOR ALL.

Yes, you do have direct control over the serial ports. In BASIC, you use the OUT instruction (the ports are on the I/O bus), not the POKE (POKEs store data in memory locations).

Control of each serial port is effected through a set of 7 eight-bit registers STARTING at the address "given" for that port (usually 3F8 hex for primary, 2F8 for secondary).

Two of the lines that are very easy to get at and use are the DTR (pin 20 on socket) and the RTS (pin 4). These are controlled throught the "MODEM CONTROL" register, located at address 3FC / 2FC hex for the primary / secondary port.

BASIC code:

```
OUT (&H3FC),1   REM TURN ON THE DTR LINE OF PRIMARY (COM 1)
OUT (&H3FC),0   REM TURN OFF THE DTR LINE OF PRIMARY (COM 1)
OUT (&H2FC),1   REM TURN ON THE DTR LINE OF SECONDARY (COM 2)
OUT (&H2FC),0   REM TURN OFF THE DTR LINE OF SECONDARY (COM 2)
```

Use bit zero for the DTR (above example), bit one for the RTS (OUT the value 2).

I have used these techniques for control before - they DO work. If you have problems I may have dropped a bit or two in interpreting this data from IBM's "Technical Reference" on the serial card.

You don't need the BASIC "OPEN" instruction unless you are setting up the usual buffers and interrupt mechanisms required for serial communications. Incidentally, you have excellent control over all of the UART's functions through these techniques (Want to set up an oddball baud rate or word length, anyone?).

Jerry Flanders   W4UKU   South Carolina
flanders@znet.groupz.net

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: JEVERHART@cayman.vf.mmc.com
Subject: [2303] Re: Dr. Seuss,etc.
Message-ID: <960105075958.23256e85@carib.vf.mmc.com>

Nils,

You queried the group regarding receiving types LF loop antennas. I'm not going to pontificate on antennas, here, except to say that there are lots of tradeoffs concerning diameter/size/gain/bandwidth. Being in the business, so to speak, I've seen lots of 'em. What it usually boils doen to is: a. What can you afford (in very broad terms) and what gives an acceptable signal to noise ratio (neighbors and wives included).

An example of a receiving loop that is very practical for 160-190 kHz was published as a Joe's Quickie in Mike C's Information Exchange in (I think) October 1993 iss of the Quarterly. I know personally of in excess of 100 loops very similar design in daily operation across the country. - Been to a good number of'em, too!

72/73,

Joe E., N2CX

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: "Steven Karty" <kartys@ncr.disa.mil>
Subject: [2326] Re: Exam Programs
Message-ID: <9600058208.AA820860474@ncr.disa.mil>

> I don't know of an FTP site for retrieving questions for the General and Advanced tests, but I can recommend an inexpensive source for some exam programs:
>
> David R. Barker, 78-6997-K Mamalahoa, Holualoa, HI 96725.
>
> I don't know his current prices, but he was selling floppy disks through the mail which contain study programs for any two license classes for only $5. I used several of his programs with my sons. David's programs are pretty good, but I've found that similar programs from MFJ provide better (more detailed) explanations when the "Help"

key is pressed. Of course, the MFJ programs are around $25.

72/73, Steven Karty - N4UHO
kartys@ncr.disa.mil

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: cebik@UTKVX.UTCC.UTK.EDU
Subject: [2299] Re: Helical antenna.
Message-ID: <Pine.PMDF.3.91.960105065117.541093180A-100000@utkvx.utk.edu>

Jay,

Many thanks for the very helpful comments on helicals. Your notes are very thorough and useful. Let me add a couple of notes based on modeling experience.

The gain of the helical--or its efficiency, if you like--is roughly proportional to the "looseness" or wide spacing of the wire. For most purposes, a loading coil at a vertical base or center of a dipole is considered a nonradiating load. While this is not absolutely true, the radiation from a high Q coil will be fairly insignificant in the overall radiation of the antenna of which it is a part. Now a helical antenna is a interbreed of a coil and a straight-line antenna. The tighter the turns spacing, the less the radiation; the wider the spacing, the greater the radiation.

Another measure of radiation efficiency is the bandwidth compared to a straightwire dipole. If that bandwidth is very narrow, then the antenna is acting like a coil with less radiation; if the bandwidth approaches that of a straight-wire dipole, the radiation is greater. (Obviously, it can never exceed that of a straight-wire dipole.)

At 3 times the frequency, the antenna is a 3-half-wavelength dipole or vertical and is subject to the same rules as the old "use my 40-meter antenna on 15." Since 2 out of the 3 half-wavelengths are not subject to end effect, the resonant point may be low, even outside the lower band edge. Only a real-time experiment will tell for sure on any particular antenna.

Winding the turns spread at the center and somewhat compressed toward the ends is sound practice: maximum current flow is in the first half of the

antenna length, and it is here we want to spread the turns to get maximum antenna action and minimum loading action.

How well a helical will work in a given apartment situation is not possible to predict. However, one might use and ATU and throw the longest possible wire out the window (with a reel to retrieve it?): then compare the two antennas and keep the better performer.

Among other apartment antennas to consider are the small loops (I believe made by AEA and by MFJ). On a window sill, they might (or might not) do as well as a helical indoors. Also, base-to-base mobile whips out the window might also work as a "remove-when-not-in-use" antenna. Stealth wires (#28?) hidden in siding crevices up to the roof and over (but out of sight) may also be a candidate. In general, the rule of thumb says begin with ideas for "longer and higher," and then come on down and in if these prove to be not feasible.

Good luck to all apartment-dwelling QRPers.

-73-
LB, W4RNL

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: N5EM@aol.com
Subject: [2366] Re: Helical antenna.
Message-ID: <960105101253_84243661@emout04.mail.aol.com>

In a message dated 96-01-05 00:02:27 EST, you write:

> These helical whips are 1/2 inch or so diameter, but you can use larger
>forms such as PVC pipe.
>
>I'd encourage anyone to try making a helical on a varnished wood or PVC
form.
> #16 enamelled wire should be fine for up to 100 watts.

>

Just a reminder that PVC is not a good RF dielectric. Fine business for a form for a helical antenna used for QRP, but beware if you should want to pump 50 to 100 watts into this antenna. They have been known to melt.

Ed

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: jcumming@clark.dgim.doc.ca (Jim Cummings)
Subject: [2387] Re: Helical antenna.
Message-ID: <9601051842.AA29522@clark.dgim.doc.ca>

>In a message dated 96-01-05 00:02:27 EST, you write:
>
>> These helical whips are 1/2 inch or so diameter, but you can use larger
>>forms such as PVC pipe.
>>
>>I'd encourage anyone to try making a helical on a varnished wood or PVC
>form.
>> #16 enamelled wire should be fine for up to 100 watts.
>
>>
>
>Just a reminder that PVC is not a good RF dielectric. Fine business for a
>form for a helical antenna used for QRP, but beware if you should want to
>pump 50 to 100 watts into this antenna. They have been known to melt.
>
>Ed
>

With the greatest respect, Ed, there is evidence that is contrary to your views. You may be unaware that Don Johnson's (W6AAQ) design of his DK3 antenna (more commonly known as the screw driver antenna) uses Schedule 40 PVC for the coil. He said that many others had claimed that PVC was no good for RF coils, yet he says in his book on HF mobile antennae (I believe it is entitled "40 + 5 Years of HF Mobiling") that he has yet to see any coil made of PVC deform due to RF energy at HF. I have had the opportunity, as well as a friend of mine, VA3WAR, to test and operate a commercial version of this antenna, the HS-1, which also used a PVC form. We did not notice any malformation of the coil form when used with as much as 150 watts output, while using Baudot transmissions - undeniably a worst case scenario. In addition, I am not aware of any problems of home-brewed versions of this antennae here in the Ontario area.

Furthermore, I recall an article in QST a few years ago where the author design some antenna traps using close windings of Formval wire on a form of PVC schedule 40 pipe/tube.

Thusly, there is ample evidence that PVC trap forms are stable for powers of up to 200 watts (and I suspect that it this is also the case at 1000 watts, but I have no direct evidence to prove it.)

Respectfully,

Jim, VE3XJ

 ====================================
              Jim Cummings
   eMail:jcumming@clark.dgim.doc.ca
  packet:VE3XJ@VE3JF.#EONT.ON.CA.NOAM
      73 and live better digitally
       DON'T GET TOO EXCITED...
  because remember, today is the first
     day of the rest of your life.
 ====================================

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: N5EM@aol.com
Subject: [2393] Re: Helical antenna.
Message-ID: <960105144222_84345659@mail06.mail.aol.com>

In a message dated 96-01-05 13:53:45 EST, you write:

>With the greatest respect, Ed, there is evidence that is contrary to your
>views.

Very good to know. I have seen this "old wives tale?" propogated on a number of occassions by respected authors and have avoided using PVC for just this reason. It certainly gives me more options in building antennas! Thanks.

Ed, N5EM

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: "David D. Meacham" <ddm@datatamers.com>
Subject: [2398] Re: Helical antenna.
Message-ID: <Pine.LNX.3.91.960105121908.3155C-100000@dt1.datatamers.com>

Ed,
My experience in the high-power transmitter field is that PVC will NOT

hold up in high electric (RF) fields. It is lossy enough that it melts or burns up!
72, Dave, W6EMD

On Fri, 5 Jan 1996 N5EM@aol.com wrote:

> In a message dated 96-01-05 13:53:45 EST, you write:
>
> >With the greatest respect, Ed, there is evidence that is contrary to your
> >views.
>
> Very good to know. I have seen this "old wives tale?" propogated on a number
> of occassions by respected authors and have avoided using PVC for just this
> reason. It certainly gives me more options in building antennas! Thanks.
>
> Ed, N5EM
>
>

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: bhopkins@polarnet.com (Bruce Hopkins)
Subject: [2296] Re: IC-706...
Message-ID: <v01530508ad124bc4e407@[204.119.24.156]>

>Was wondering if anyone else on the circuit is starting the New Year with an
>Icom 706? I have been using the little beastie at 5 watts out today and
>aside from fan noise, and clicking relay noise with full breakin, am
>enjoying its 1 hertz readout, band scan scope, 6 & 2 mtr all mode coverage
>and ease of use.
>
>72/73 Bob WB7CNJ - Norcal #201, QRP-L #333.

Hi Bob,

     To you and all the other folks here on QRP-L, All the best in the New Year and may a good elf put a 706 in your sock...

     I was pleasantly suprised to find an IC-706 under my tree Christmas day... I guess it doesn't hurt to have your favorite Elf (my wife Lin - WL7BHT) also be a Ham... She's a rabid CW operator so I was not too suprised to find a 250hz CW filter in the box... She claims to have looked through the most recent ham mags and simply found the page with the most thumb prints and drool on it...

My overall impressions after 10 days of operation are very favorable...I wanted something small enough to take with me on this coming summers kayak trips, also to put in our small (C-120) airplane... The 706 certainly packs more features in a smaller package than any other rig I know of... I have large hands and was unsure how comfortable it would be to operate, due to the alpha-numeric display and soft programmed function keys they were able to leave plenty of room for us ham fisted people... It is actually easier to use physically than many of the VHF/UHF radios of the day... Make no mistake it will take several hours of operating before the menu commands come out automatically but the most commonly used day to day features are learned quickly... The built in keyer and up/down paddle option saves space and weight if you are packing in... The narrow filter is quite clean with minimal attenuation... On the air reports have all been favorable...

Is the 706 the ideal QRP rig, probably not, the power consumption is too high for most... It is however probably one of the best portable radios on the market today... General coverage 300khz to 200mhz with 100 watts 160 thru 6 plus 10 watt 2 meter coverage and multimode on all bands is quite a feat in this size package... I have it sitting on top of my Ten-Tec ARGO 555 and it makes the ARGO look huge...

If anyone has specific questions on the rig I would be happy to correspond directly with you... If I have any problems I'll post another general notice...

I'am looking forward to meeting the group here on QRP-L... It seems like a really super bunch of hams hang out here (but then what else would one expect from QRP'ers)... If any of you are needing Alaska I will be happy to make schedules as my work and band conditions permit.

73
Bruce - KL7JAF

/-*-* --*- / -** * / -*- *-** --*** *--- *- **-* / -**-* / --*- *-* *--* /
[ ]
[Bruce Hopkins - KL7JAF LIN HOPKINS - WL7BHT]
[ORP-L #380 ISSB #14548 QRP-L #XXX ISSB #14547]
[McPig #003 TFO - 359 UWPN #001 TFO - 350]
[ ]
[P.O. Box 10079]
[Fairbanks,Alaska]
[99710-0079]
[ ]

[E-Mail:bhopkins@polarnet.com BBS:KL7JAF@KL7GNG.NAK.US.NOAM]

[   ]
["Everyone should learn to play the flute... But not well..."   ]
[____]

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: Frank G3YCC <frank@yorks.demon.co.uk>
Subject: [2406] Re: newcomer
Message-ID: <bEc3JHAVWC7wEwD+@yorks.demon.co.uk>

In message <199601041407.JAA77971@nss2.CC.Lehigh.EDU>, John Mckee
<jmckee@rfmd.com> writes
>
>Hello cyberhams and fellow QRPers,
>
>My name is John Mckee WB4OFT and I am a relative newcomer
>to QRP operating even though I have been a ham about 26 years.
>My first venture into QRP has been with an NN1G SW-30 kit. This has
>been the most fun I've had in over 20 years. With well over 100 QSOs
>I am hooked! I have been able to work stations from Canada to South
>America. My first QSO was with a VE3.
>
Welcome and hope you will enjoy QRPing!
>A lot of my QSOs have been QRP to QRP.
>
>One area that I would like to explore is milliwatting. I would be very
>interested
I have worked to VE and E Coast USA using about 40 milliwatts to a h/b 2
ele monoband beam on 15 metres, but, wait for it, when the sun spots
were active and am sure you will also do it. Great fun, IF you can stand
the strain. Imagine telling a DX station you are on QRPp, AFTER you have
his report to you, never, ever before! You can almost hear him flop into
a jibbering heap onto his 2 KW linear...! Also have worked from G to VK
with one watt on 14 mHz with a dipole.
>to here what others have been able to do with QRPp and what types of rigs
>you are using. I also would like to homebrew more of my stuff.
>
As far as rigs are concerned, any old TX will put out RF, the important
bit is the receiver, Oh and yes the bit outside, the aerial (English for
antenna which is what ants use - forgive the pun ... ants. Sorry British
humour!) Oh yes, the mode, sorry THE MODE for QRP is CW and long may it
last.
>One topic that seems to come up a lot in regard to the NN1G and similar
>rigs is the audio level.

Sorry can't help there. Some of the US rigs just turn up their toes and
die if used here, or so I am told. The bands are much different,
especially 7 MHZ
>
>WB4OFT
>QRP-ARCI#8794, NEQRP#407
Remember, QRP is a hobby, ENJOY!

--
Frank G3YCC

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: JessQRP@aol.com
Subject: [2402] Re: OHR 400 "Narrow" Filtering.
Message-ID: <960105163614_84403059@emout05.mail.aol.com>

I have gotten feedback from several folks on the filter mods. There is the
varacter variable bandwidth mod with the associated losses (most people have
noticed some attenuation of signal at all levels) and then there is the
crystal bypass mod. I would be inclined to go with the bypass mod. I really
like the cleaness of the current filter. With the audio filter switched in
and the IF hiss removed, the received signal seems to "jump" 2 s units worth.
There was one fellow that put .2 uf caps on the diodes in the IF and was able
to eliminate most of the high freq hiss. I spoke with Dick at OHR about the
"lack" of AGC and he felt that for the cost and complexity of putting in a
"better" AGC circuit that it just wasn't worth it. He did say that he did
plan on evaluating the variable filter for the 400 in the future. I have no
problem using the radio as is, as the receiver is great and I use a narrow CW
filter anyway, but with the small amount of cold drift that this radio has
and the fact that we all have trouble accurately zero beating, most of the
QRP answers that I get to my CQ are off center just a bit and having the
ability to go a bit wider on the filter would be nice. From what I
understand, the bypass option does not degrade the performanc that much,
other than a small amount of "blow by" on strong signals. I will be
installing the caps on the IF diodes soon and the bypass mod for a bit wider
switchable receive. As far as hooking the switch up to the AGC and hard
wiring the AGC, or adding a new switch for the "wide" filter, not sure what I
am going to do. I will probably add it internal and try it for now and then
decide where to put it.
As far as the radio itself goes, I ahve not even turned on the main station
rig or any of my other QRP rigs since I got the 400 finished. I class act all
the way. The only rub that I have with the rig is the size, it's a bit large,
and all of the point to point wiring that is in it. With the great
instructions that Dick has in the manual and the way that the radio is wired,

this is really a minor point. It's just the fact that with the lid off the radio is a little "busy" under the hood. I plan on adding the filter caps to the IF, the "wide" filter bypass mod and a KC-1 keyer. If you got Dicks Curtis keyer, you will find that the 56k resistor in the weighting loop needs to be decreased. I found that a 5 k resistor in there will give the same weighting as most of the common keyers like the MFJ and the AEA.
On alignment. I did not use a scope or freq counter for the alignment. In the places where the alignment called for a freq counter, I used my TS140 and had it hooked up to either a dummy load or a external antenna, depending on the strength of the signal. As far as the power level adjustments, I just used the TS140 on the dummy load and tuned for max S units. I went back and checked all of the alignment and adjustments using a scope and freq counter and they were so close that did not have to touch up any of the adjustments. The reason that I mention this is that I notice that there are a lot of folks that have sent their rigs back to Dick for alignment since they did not have a freq counter. If they have a main station receiver, then they should be able to do an acceptable alignment.

Best
Jess N0TFI

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: ddonald@vikings.onecomm.com (Dave Donaldson)
Subject: [2397] Re: QRPing an HR2510

> From: Jacqueline Herman <jherman@sierra.net>
 from the list).
>
> Included in the manual were instructions for modifying the rig for
> 26-28 MHz. I find this quite nauseating and am wondering if Uniden
> or the dealer included this page. Shame on one of them. (I bought
> the rig second hand from an OT ham so I know he didn't insert these
> mod instruction.)

Just for information, a company called I believe Chip set or something like that sells a new processor which allows in to go to the 12 meter band. Of course they won't tell you how to modify the synthsizer to increase the bandwidth. The plus to the processor is the memory, scan, pl and other big rig bells and whisles. For low power there was a mod in qst with in the last 2 years to reduce power below a watt to drive transverters. I dont know the date but if you want, let me know and I will send you the date tommorrow.

Dave WB7DRU
>
>

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: "Arjen Raateland, SYKE/YV, puh. 90-4030 0457" <Arjen.Raateland@vyh.fi>
Subject: [2298] Re: RE: CMOS III was Re: MFJ 9040
Message-ID: <01HZNBWP71ZC8Y4Y39@vyh21.vyh.fi>

Preston and gang,

>On the current draw, I haven't measured it, as I run the CMOSIII off of 12v
>with a 5v regulator (cheap 78L05) which is all it needs. But I note the

Note that a 78L05 regulator draws abt. 4 mA quiescent current, so the
low q.c. of the keyer is unimportant in comparison. I've been looking
for a regulator with lower q.c., but they are very expensive and also
hard to get.

73, Arjen OH2ZAZ

Arjen Raateland
Suomen Ymp rist keskus / YV
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-.-. -.-

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: JEVERHART@cayman.vf.mmc.com
Subject: [2379] Re: SK3 and touch paddles (long!)
Message-ID: <960105124211.23256e85@carib.vf.mmc.com>

Richard,

You wrote requesting more info on (among other things) touch paddles.
I don't have much to add to what I wrote earler, except:

a. I believe the Ramsey paddles have a high-impedance input amplifier on each paddle which senses ac line signals picked up by the user's finger when it contacts the appropriate paddle. Thus it depends on being surrounded by ac power (wiring in building walls, etc.), skin resistance and has the unfortnate characteristic of being very sensitive to stray rf pickup. I have experience with this technique and its foibles. More than once I've been "blessed " wiht rf in the shack. This was induced into the touch paddle as soon as I began transmitting. The keyer thought that the paddles were being activated and the net result was a psudeorandom keying pattern that was stopped only by shutting off power to the keyer.

b. I've seen another capacitance touch method - I think it is the one from Sprat. Here's a cursory description of how it operates.

Each side of the keyer paddle has two plates separated by an air gap and insulated from being touched by the operator. A very crude ASCII aketch shows this:

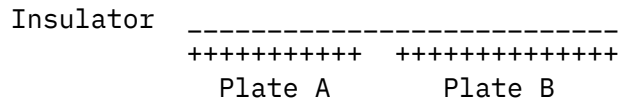

Plate A is connected to a square wave signal source and Plate B goes to a sensitive amplifier the gap between the two plates assures that little square wave signal feeds the amplifier. When the operators finger is pressed against the insulator, the capacitance of the finger couples the square wave to the amplifer, which then amplifies it and feeds it to a detector. The detector provides a dc switched signal to the keyer.

I haven't tried this, but it shows promise because it does not rely on skin conductivity or the presence or absense of an ambient ac field.

c. The capacitive touch plate idea is something I'm trying to work up for a QRP Quarterly or other newsletter article. Unfortunately, I have several dozen other ideas, too and can only work on them in my spare time.

d. The optoelectric idea is an interesting one. A local ham buddy has one and swears by it. I found that it takes some getting used to and some precision construction to fabricate. His is quite reliable (while he's using it) and easily survives the Field Day environment with its attendant humidity, dirt, strong rf fields and lack of ambient ac.

There! Aren't you glad I didn't have much to say?

72/73,

Joe E., N2CX

work (weekdays)   e-mail: jeverhart@cayman.vf.mmc.com
home (evenings, weekends) e-mail: n2cx@ix.netcom.com

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: nskousen@scientech.com (Niel Skousen)
Subject: [2388] Re: SK3 and touch paddles (long!)
Message-ID: <v02130500ad1325562a33@[198.60.91.132]>

>Hi gang,
  <snip>
>Touch paddles
  <snip>
>Some more questions
>I have heard about other principles. How exactly do capacitive touch
>paddles work? I haven't heard excited reports about it so far on the
>list, only a passing mention from time to time. Do capacitive touch
>paddles work *really* well for somebody? Please tell me ...

A number of years ago (shortly after Mt.St.Helens) I saw an article in QST
on a simple capacitive paddle (by R.Lewellan I believe ?) but I have not
been able to find it since.

Does anyone have a copy of this article, and/or experience with the circuit ??

TNX in advance
Niel

----- -.. . .-- .- --... ... .-   ------------
Niel Skousen,   nskousen@scientech.com
SCIENTECH Special Projects
208-525-3742, 529-4721 (FAX)   WA7SSA

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: bmitchel@kodak.com (Brad Mitchell)
Subject: [2300] Re: What he wants in a kit
Message-ID: <9601051217.AA20381@iiatasun.cba.Kodak.COM>

I would not quibble about most of those attributes Brad would like to see in his dream-come-true QRP kit except one:

Why in the world would you want enough audio output "...to drive other people crazy."??? I didn't think that was the point of our hobby.

Quietly in Colorado, Allen - AA0YU

==========

Because, that's how my family refers to the sweet sound of cw flowing in the air.. It's a relative term for me.. Hmm.. maybe in Colorado, a lm-386 can echo through the mountains, and provide enough audio, but in the bustling upstate NY village of Brockport, you need AUDIO.

:-)//

73 Brad WB8YGG

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: cebik@UTKVX.UTCC.UTK.EDU
Subject: [2302] Re: What he wants in a kit
Message-ID: <Pine.PMDF.3.91.960105073530.541093180E-100000@utkvx.utk.edu>

On Fri, 5 Jan 1996, Brad Mitchell wrote:
> Why in the world would you want enough audio output "...to drive other
> people crazy."??? I didn't think that was the point of our hobby.
>
> Quietly in Colorado, Allen - AA0YU
Perhaps it is a control mechanism for displacing QRO wishes: if not QRO RF, then QRO audio.

I seem just the opposite: when operating the QRO rigs, I use speakers; when operating the QRP+, I use phones. If I get below 1 watt, I guess I'll use ear plug phones.

|-)
LB, W4RNL

From qrp-l@lehigh.edu Fri Jan 5 21:17:51 1996
From: bmitchel@kodak.com (Brad Mitchell)
Subject: [2329] Re: What he wants in a kit
Message-ID: <9601051356.AA21170@iiatasun.cba.Kodak.COM>

> Perhaps it is a control mechanism for displacing QRO wishes: if not QRO
> RF, then QRO audio.
> |-)
> LB, W4RNL

Yes, I really like qrp because it's easy to build..
> I've always said if I could build a 1kw full duty cycle cw transceiver
> for the same time effort, and money investment as a 1watter,
> I would do it. At the same time I would also build the low
> power ones as well, so the gell cell would last longer than 3ns.
>
> 73 Brad WB8YGG
